

Claims

1. A method for managing connection objects in a telecommunications network having network elements including a first
5 network element (A) and a plurality of other network elements, comprising the steps of:

from among the plurality of the other network elements based
on operator input, determining a second network element adjacent to the first network element; and
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automatically transposing data associated with the first network element (A) for the second network element (B) such that the representation of a connection object between the first
15 and second network elements for the second network element (B) is made commensurate to the representation for the first network element (A) for managing the connection object.

2. The method according to claim 1, further comprising the
20 step of determining an origination within the first network element (A) associated with the connection object to be managed.

3. The method according to claim 1, wherein said data comprises data obtained from a history of commands associated with administering the connection object for the first network element (A).
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4. The method according to claim 3, wherein said data further
30 comprises data obtained from a database stored in any of the network elements.

5. The method according to claim 1, the step of transposing further comprising, in case of an absence of objects prerequisite to managing the connection object, creation of said
35 prerequisite objects for the second network element (B).

6. The method according to claim 1, wherein the connection objects comprise link sets and links, further comprising the step of detecting a link set terminating at the first network element (A) by querying for the second network element (B) all objects representing link sets.

7. The method according to claim 6, wherein the step of transposing, in case no link set terminating at the first network element (A) is detected for the second network element (B), creates a new link set for the second network element (B) by making the link set of the second network element (B) commensurate to the link set of the first network element (A), thereby managing the connection object.

8. The method according to claim 6, wherein the step of transposing deletes a link and/or a link set at the second network element (B) by deleting the link and/or link set of the second network element (B) corresponding to a deleted link and/or link set of the first network element (A), thereby managing the connection object.

9. The method according to claim 6, wherein the step of transposing modifies a link and/or a link set at the second network element (B) by modifying the link and/or link set of the second network element (B) corresponding to a modified link and/or link set of the first network element (A), thereby managing the connection object.

10. The method according to claim 6, wherein the step of transposing performs a status change of a link and/or a link set at the second network element (B) by performing a status change for the link and/or link set of the second network element (B) corresponding to a status change of the link and/or link set of the first network element (A), thereby managing the signaling connection.

11. The method according to claim 1, wherein the connection objects comprise trunk groups and trunks, further comprising the step of detecting a trunk group terminating at the first network element (A) by querying for the second network element (B) all objects representing trunk groups.

12. The method according to claim 11, wherein the step of transposing, in case no trunk group terminating at the first network element (A) is detected for the second network element (B), creates a new trunk group for the second network element (B) by making the trunk group of the second network element (B) commensurate to the trunk group of the first network element (A), thereby managing the connection object.

13. The method according to claim 11, wherein the step of transposing deletes a trunk and/or a trunk group at the second network element (B) by deleting the trunk and/or trunk group of the second network element (B) corresponding to a deleted trunk and/or trunk group of the first network element (A), thereby managing the connection object.

14. The method according to claim 11, wherein the step of transposing modifies a trunk and/or a trunk group at the second network element (B) by modifying the trunk and/or trunk group of the second network element (B) corresponding to a modified trunk and/or trunk group of the first network element (A), thereby managing the connection object.

15. The method according to claim 11, wherein the step of transposing performs a status change of a trunk and/or a trunk group at the second network element (B) by performing a status change for the trunk and/or trunk group of the second network element (B) corresponding to a status change of the trunk and/or trunk group of the first network element (A), thereby managing the connection object.

16. The method according to claim 1, wherein the step of determining the second network element adjacent to the first network element comprises the steps of:

5 extracting a first point code and a first sub-network identifier identifying the first network element (A), and a parameter indicating an adjacent network element;

10 comparing the parameter and the first sub-network identifier to a point code and a sub-network identifier of a respective network element from at least a subset of the other network elements.

15 17. The method according to claim 1, wherein the telecommunications network supports a signaling system 7 standard.

18. The method according to claim 1, further comprising the step of providing a task group that is transparent to an operator for grouping objects for managing the connection object associated with the first network element (A) and dependent objects for managing the connection object associated with the second network element (B).

25 19. A computer-readable product having recorded thereon computer instructions for instructing a computer to execute a process in accordance with any of the preceding claims.

20. A system for managing a connection object in a telecommunications network, comprising:

30 a plurality of network elements associated with the telecommunications network;

35 a control module (M) for configuring a first network element (A) of the plurality of network elements in accordance with an operator input; and

- a control program associated with the control module that determines a second network element (B) that is adjacent to the first network element (A) and causes a representation of the connection object of the first network element (A) to be
5 transposed for the second network element (B) such that a corresponding connection object for the second network element (B) is made commensurate to that for the representation first network element (A).
- 10 21. The system of claim 21, wherein the control program further determines an origination within the first network element (A) associated with the connection object to be managed.
22. The system according to claim 21, wherein the control
15 module transposes operator commands for the second network element (B).
23. The system according to claim 21, wherein the control module manages a task group that is transparent to an operator for grouping objects for managing the connection objects
20 associated with the first network element (A) and dependent objects for managing the connection object associated with the second network element (B).
- 25 24. The system according to claim 21, wherein connection objects of the network elements comprise link sets and links, wherein the control module detects a link set terminating at the first network element (A) by querying for the second network element (B) all objects representing link sets.
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25. The system according to claim 24, wherein the control module determines the link set and links of the second network element (B) terminating in the first network element (A) by at least determining that the first and second network
35 elements are in a same sub-network.

26. The system according to claim 25, wherein the second network element is a border network element having additional signaling connections.

5 27. The system according to claim 21, wherein connection objects of the network elements comprise trunks and trunk groups, wherein the control module detects a trunk group terminating at the first network element (A) by querying for the
10 second network element (B) all objects representing trunk groups.

28. The system according to claim 27, wherein the control module determines the trunk groups and trunks of the second network element (B) terminating in the first network element
15 (A) by at least determining that the first and second network elements are in a same sub-network.

29. The system according to claim 21, wherein the telecommunications network supports a signaling system 7 standard.